

In the Claims

Please amend the claims as follows:

1. (Original) A data storage device comprising:

a base plate having a top surface;

a spindle motor positioned on the top surface of the base supporting one or more data storage discs for rotation on the spindle motor;

an actuator assembly positioned on the top surface of the base plate adjacent the data storage disc; and

a flex printed circuit board assembly on the top surface of the base plate having actuator and motor electronic control components thereon on the top surface of the base.

2. (Original) The data storage device of claim 1 further comprising a power combo chip positioned on the flex printed circuit board assembly positioned on the top surface of the base.

3. (Original) The data storage device of claim 1 further comprising a top cover attached to the base to form an enclosed space enclosing the actuator assembly, the one or more data storage discs and the spindle motor and wherein the actuator and motor electronic control components on the flex printed circuit board assembly are outside the enclosed space.

4. (Original) The data storage device of claim 1 further comprising:

an interface connector attached to the flex printed circuit board and to the base plate.

5. (Original) The data storage device of claim 1 wherein the flex printed circuit board assembly comprises a flexible printed circuit and
a stiffener attached to a bottom surface of the flexible printed circuit.

6. (Original) The data storage device of claim 5 wherein the stiffener is metal and forms a ground plane for the circuitry on the flexible printed circuit.

7. (Original) The data storage device of claim 6 further comprising a power plane formed on the stiffener beneath the flexible printed circuit.

8. (Currently Amended) The data storage device of claim 5 wherein the flexible printed circuit and the stiffener each have a coextensive portion inserted into ~~the~~ an interface connector.

9. (Previously Presented) The data storage device of claim 3 wherein the flexible printed circuit comprises a pigtail lead extending beneath the cover to the actuator assembly to connect the electronics components to the actuator assembly.

10. (Previously Presented) The data storage device of claim 3 wherein the flexible printed circuit comprises a pigtail lead extending beneath the cover to the spindle motor.

11. (Original) The data storage device of claim 10 further comprising another pigtail lead extending beneath the cover to the actuator assembly to connect the electronics components to the actuator assembly.

12. (Original) A flexible printed circuit assembly for use in a data storage device having an actuator assembly adjacent a spindle motor rotating one or more data storage discs, the assembly comprising:

a flexible printed circuit having a pigtail lead for connection to the actuator assembly of the data storage device and a pigtail lead for connection to the spindle motor of the data storage device;

actuator control and signal processing electronics components mounted on, and electrically connected to, the flexible printed circuit; and

a stiffener plate coextensive with a portion of the flexible printed circuit forming a ground plane for the components on the flexible printed circuit.

13. (Original) The flexible printed circuit assembly of claim 12 further comprising:
an interface connector attached to the flexible printed circuit and to the stiffener.

14. (Original) The flexible printed circuit assembly of claim 13 further comprising a power plane formed on the stiffener for providing power to the components on the flexible printed circuit.

15. (Original) The flexible printed circuit assembly of claim 14 wherein the power plane and ground plane are separated by an insulator.

16. (Original) A printed circuit assembly comprising:
a flexible printed circuit having one or more electronic circuit components requiring a ground and a power connection mounted thereon;
a stiffener plate coextensive with a portion of the flexible printed circuit forming a ground plane connected to the one or more components.

17. (Original) The assembly according to claim 16 further comprising a power plane formed from the stiffener plate connected to said one or more components forming the power connection therebetween.

18. (Original) The assembly according to claim 17 wherein said one or more components includes a multi-chip package.

19. (Original) The assembly according to claim 17 wherein said power plane and ground plane lie in a common plane of the stiffener plate.

20. (Original) The assembly according to claim 16 further comprising one or more discrete circuit components fastened to the flexible printed circuit and to one of the ground and power planes.